

March 24, 2017

Administrative Law Judge James R. Mortenson Office of Administrative Hearings (OAH) 600 N. Robert St P.O. Box 64620 St Paul, MN 55164-0620

RE: Rebuttal Comments on Planned Amendments to Water Quality Standards and Tiered Aquatic Life – Revisor's Identification Number RD42374

Dear Judge Mortenson,

The Minnesota Chamber of Commerce (Chamber) is a statewide business organization representing approximately 2,300 businesses that this proposed rule has the potential to impact. The Chamber appreciates the opportunity to provide rebuttal comments on Minnesota Pollution Control Agency's (MPCA) proposed rule amendments to establish tiered aquatic life uses (TALU) within the existing Class 2 water quality standards based on biological potential.

## While the MPCA has provided additional information during the comment period, the public has not had sufficient time to review this highly technical and complicated information:

- Index of biotic integrity (IBI) calculation mechanism
  - Our original comment: "The index of biotic integrity (IBI) calculation mechanism is an essential piece of the proposed rule. However, the MPCA did not provide information on the calculation mechanism<sup>1</sup> with or prior to publication of the proposed rule<sup>2</sup>. There has not been sufficient time to review and comment on the proposed mechanism. The scientific and regulated communities must be able to review, comment on, and hopefully verify this mechanism before this rule is adopted. Furthermore, all other numeric water quality standards in Minnesota Rules can be sampled, analyzed and verified by reliable and qualified third-parties; all of which helps provide

<sup>&</sup>lt;sup>1</sup> Generally any adequately trained biologist can collect fish and macroinvertebrates at a site using standard methods and count the number of fish and macroinvertebrate taxa and individuals. Currently, only MPCA staff can convert this data into an IBI score.

<sup>&</sup>lt;sup>2</sup> January 26, 2017 and February 8, 2017, MPCA published part of the IBI calculation mechanism as a "draft".

10 years apart and because variability that is the result of changes caused by anthropogenic stressors (i.e., the changes in biological communities that the IBIs are designed to detect) cannot be partitioned out."

- Our rebuttal comment: In our review of the documents cited by MPCA in this response, it is apparent that MPCA has completed additional work to make the assertion that "This variability is 4 points for macroinvertebrates and 3 points for fish samples." Since MPCA did not "show their work", we cannot verify that the data supports this assertion. Therefore, our concerns and comments stand until MPCA "shows" their work and the supporting data.
- The MPCA did not incorporate information regarding implementation measures within the proposed language. This oversight does not allow the regulated community to review and understand the potential implications prior to providing comments. The MPCA comment on this issue in Attachment 1 of the response to comments document states "While implementation must flow from the rule, all the details of implementation do not need to be included in the rule." On page 17 of Attachment 2, the Chamber comment is not addressed. At a minimum, the SONAR needs to address the permitting implications of this rule.

## Reclassification of streams without the adequate consideration of whether the actual attainable use for the stream segment is and should be Limited Resource Value Waters (Class 7).

- Our original comments:
  - The MPCA should change its procedures for proposing TALU designation changes to include a proper and full assessment of streams in each evaluation area, including whether some stream segments would be appropriately designated as Class 7 waters<sup>4</sup>.
  - The MPCA should change its procedures for proposing TALU designation changes to include a proper and full assessment of streams in each evaluation area, including whether the IBI protocol can be appropriately applied—then through this UAA process all Class 2 subcategories (e.g., 2Bg, 2Be, and/or 2Bm), or Class 7 use, would be assigned through rule-making for each water body.
- MPCA's response page 36 of Attachment 2, March 17, 2017: "Limited resource value waters (Class 7) are for the most part waters that are not appropriate (e.g., ephemeral) for application of the current biological tools (i.e., IBIs, biological criteria). As such, ephemeral stream reaches are avoided as part of biological monitoring, (Hearing Exhibit D, SONAR [p. 41, footnote 19]; Attachment 6) and therefore, are reasonably not part of the UAA process for TALUS."
- Our rebuttal comment: The MPCA somewhat missed our point. MPCA, in it's assessment of all the state's waters to determine which waters would be more appropriately classified as a "modified" use category under the new TALU rules, can and should take the opportunity to positively identify those waters that are really Class 7, limited resource value waters.

MPCA's proposed rules will have the unintended consequence of applying IBI-based WQS to unlisted lakes and ephemeral streams (waters of the state for which IBI procedures are not applicable)—strikethrough of 2A, 2Bd, and 2B classifications in 7050.0220 Subp. 1.

• Our original comments:

<sup>&</sup>lt;sup>4</sup> Minn. R. 7050.0140 Subp. 8: **Class 7 waters, limited resource value waters.** Limited resource value waters include surface waters of the state that have been subject to a use attainability analysis and have been found to have limited value as a water resource. Water quantities in these waters are intermittent or less than one cubic foot per second at the 7Q10 flow as defined in part 7050.0130, subpart 3.

the transparency needed for such standards. For these reasons, proceeding with rule-making at this time is not reasonable."

- MPCA's response, given on page 6 of Attachment 2 dated March 17, 2017: "The documentation 0 for the IBIs has been available on the MPCA's website for this rulemaking for public review for approximately 3 years. This was sufficient time for those interested in these tools to review them and provide feedback. As part of TALU outreach with Barr Engineering (August 2016), the Agency was asked to provide additional details on the mechanisms behind calculating the IBI model scores. The Agency indicated that it would compile this information and the information was made available publically on January 26, 2017 (macroinvertebrate IBIs; Hearing Exhibit L.7) and February 8, 2017 (fish IBIs; Hearing Exhibit L.8). These documents were also introduced as exhibits during the hearing on February 16, 2017. The information contained in these documents is largely contained within Exhibits S-64 and S-65 or was made available through correspondence with Barr Engineering staff. Although the Agency does not view these new documents as necessary for reviewing the merit of TALU rule amendments, the Agency has provided sufficient time for stakeholders to review the small amount of additional information in these new documents. In addition, the Agency has provided documents that further clarify methods by incorporating several existing protocols into two documents (Attachments 3 and 4)."
- Our rebuttal comment: The IBI calculation mechanism has been available for less than two months, not three years. These documents are essential to understanding the IBI scores and whether the proposed IBI water quality standards are reasonable, and since these documents were not provided in a timely manner, our original concern remains, and therefore our original comment remains unaltered.
- Year-over-year variability in the computed IBI due only to annual hydrology variability.
  - Our original comment: "The MPCA must provide an assessment of the year-over-year variability in the computed IBI due only to annual hydrology variability. The MPCA has yet to demonstrate that IBI values will not vary significantly due to normal wet-year to dry-year<sup>3</sup> fluctuations. Such consistency is needed to prevent the "luck-of-the-draw" in determining whether a stream would meet or not meet its IBI water quality standard (WQS)."
  - MPCA's response on page 5 of Attachment 2 dated March 17, 2017: "In general, the use of biological data has the advantage of providing an integrated assessment of stressors over time due to the fact that many of these organisms are relatively long lived (Hearing Exhibit D, SONAR [p. 40]). However, there is still variability in these assemblages that needs to be understood. As part of Minnesota's biological monitoring framework, the Agency estimates the variability in sampling. Therefore, it is possible to determine IBI score variability associated with sampling the same sites across years (i.e., year-to-year variability). This is estimated by calculating 90% confidence limits for IBI scores using the residual error term from an analysis of variance (ANOVA) (Exhibit S-85). The datasets used to estimate confidence limits included replicate samples collected from sites across years (including 1210 macroinvertebrate sample and 1531 fish samples). This variability is 4 points for macroinvertebrates and 3 points for fish samples. This variability is manageable and can be used as part of assessments and UAAs when scores are near thresholds. It should be noted that these values likely overestimate the variability that can be assigned to annual differences alone because it includes samples that were collected more than

<sup>&</sup>lt;sup>3</sup> The fluctuations envisioned in this comment would not include "drought" years, or extreme wet years, but the more normal fluctuations expected between the 10% wettest and the 10% driest years, for example.

- <u>The state's definition of waters of the state is so broad that the default application of a 2Bg use</u> <u>classification to unlisted waters, waters where IBI WQS are not applicable (lakes, ephemeral</u> <u>streams, waters that would be Class 7 if properly evaluated), makes this proposed rule</u> <u>unreasonable.</u>
- The MPCA should review and modify the proposed rule to allow the existing 2A,2Bd, and 2B use classifications to remain—for example, cool and warm water lakes, ephemeral streams, and unlisted waters could (and should) remain Class 2B waters.
- MPCA response, Part D of Attachment 2, March 17, 2017: "Several commenters requested specific clarifying changes to the proposed rule. Most of these comments did not criticize the intent of the proposed rule language, but rather sought clarification and shoring up of the rule amendments to ensure that the intended language was not ambiguous. In most instances, the MPCA found the comments constructive and the MPCA proposes modifications to the rule as proposed to address these comments. In some cases, however, the MPCA determined that revisions to the proposed rule language is not needed, and the Agency provides its reasoning below."
- Our rebuttal comment: We agree with MPCA's modified proposed rule language.

The Chamber appreciates your consideration of our concerns regarding the proposed rule amendments. If you have any questions regarding our concerns, please feel free to contact me at (612) 292.4668

Sincerely,

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Tony Kwilas Director, Environmental Policy